

ABSTRACT OF THE DISCLOSURE

In a rotatable duct type shrouded rotating wing, permanent magnets are arranged in the outer periphery of a rotatable duct, rotor blades are connected to the inner periphery of the rotatable duct, the rotor blades having a rotatable support portion at about every 2.5 m to prevent deflection or distortion. The shroud and the rotatable duct are constantly in vertical contact with each other, and an appropriate horizontal spacing is provided between the inner periphery of the shroud and the outer periphery of the rotatable duct to permit expansion and contraction of the rotatable duct and the rotor blades. Accordingly, even if the shrouded rotating wing is of a large radius, is used in a horizontal orientation and undergoes a rapid change of direction mounted to a turntable, it always rotates stably to generate lift and thrust.